Email: cewwm@bwssb.gov.in

Ph: 080-22945106

ಬೆಂಗಳೂರು ನೀರು ಸರಬರಾಜು ಮತ್ತು ಒಳಚರಂಡಿ ಮಂಡಳಿ

BANGALORE WATER SUPPLY & SEWERAGE BOARD

O/o Chief Engineer(WWM-East), 5th Floor, Cauvery Bhavan, Bangalore-560009.

No. BWSSB/CE(WWM-East)/DCE(WWM-E&W)/TA-1/ 657/2023-24 Date : 18/02/2024

ADDENDUM/CORRIGENDUM

Sub: Tender for Work of Providing and Laying 900/1200/1400mm dia RCC NP3 Class Sewer Line including Trenchless Technology Method from MV Garden to Amarjyothi Layout ISPS, Domluru.

Ref: IFT No. BWSSB/CE(WWM-E)/ACE(WWM-N-E)/DCE(WWM-E&W)/TA-1 /607/ 2023-24 Dt: 01.02.2024.

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With reference to the above subject, invitation for the tender was invited vide IFT mentioned in reference letter. This addendum/corrigendum indicates the details of changes made in the uploaded Bid Document along with replies to the pre bid queries.

Chief Engineer(WWM-E)
BWSSB

Compliance to Bidder Queries-Providing and Laying 900/1200/1400 mm dia RCC NP3 Class Sewer Line including Trenchless Technology Method from MV Garden to Amarjyothi Layout ISPS, Domluru.

<table>
<tr><th rowspan="2">Sl.no</th><th colspan="2">Reference</th><th rowspan="2">Ammedment requested</th><th rowspan="2">Compliance</th></tr>
<tr><th>Tender Clause</th><th>Description</th></tr>
<tr><td>1</td><td>Section6:Contract data</td><td>Mobilization Advance</td><td>10% Interest free Mobilization advance can be considered.</td><td>The amounts of the advance payment are: [42]
<table>
<tr><td>Nature of Advance</td><td>Amount (Rs.)</td><td>Conditions to be fulfilled</td></tr>
<tr><td>1. Mobilization</td><td>05% of the Contract price</td><td>On submission of un-conditional Bank Guarantee. (to be drawn before end of 45 days)</td></tr>
</table>
Repayment of advance payment for mobilization : [42]
The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the 3rd Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 percent of the Contract Price or 3 months from the date of payment. The first installment of advance has to be recovered within 10 installments, whichever period concludes earlier, and shall be made at the rate of 7.5 percent of the amounts of all Interim Payment Certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clauses 17 and 26.</td></tr>
</table>

<table>
<tr><td>2</td><td>Section6:Contract data</td><td>Payment terms</td><td>Payment Terms can be considered as-After Supply of RCC pipes-75% After Laying & Jointing-20%,
After conducting Flow Test & Commissioning-5%</td><td>Payment Terms.
The employer will make the payment to the items of pipelines on the following terms-(Clause 43 GCC).<table><tr><td>70% of the contract price</td><td>After supply of DWC/RCC pipes to site of work</td></tr><tr><td>25% of the contract price</td><td>After laying of pipes.</td></tr><tr><td>05% of the contract price</td><td>After Completion and commissioning of Pipeline work including complete restoration.</td></tr></table></td></tr>
<tr><td>3</td><td>In BOQ: Item No.34,35,36,37&38</td><td>For manufacture of RCC NP3 pipe by using Ordinary portal and cement(OPC)</td><td>Please clarify:-Chapter 10 of Section-7 It.no10.1in Page no.105 it is mentioned Sulphate Resistant cement (SRC) and marked with ISI</td><td>Tender conditions Prevails</td></tr>
<tr><td>4</td><td>Engineer's Requirement</td><td>Requirement of Site office including furnitures, survey instruments & personal computer & laptop with accessories, printers</td><td>The same has not been considered in BOQ. The cost for the same to be considered during the tender evaluation or delete from the contract.</td><td>Tender conditions Prevails</td></tr>
<tr><td>5</td><td>Engineer's Requirement on Page No.21 of PART-3 under Technical Specification Clause no 3.5-Transport</td><td>The Contractor shall provide one new top end Mahindra Scorpio version fully loaded to be kept available at all times for the sole use of the Engineer and his staff.</td><td>For providing vehicle, we would like to inform you that, recently in Arkavathi Wss Tender, the same was included by incorporating to provide vehicle and the capital cost of vehicle will be reimbursed at actual cost under provisional sum excluding insuracne. The same has not been considered. Either you consider the same or delete from the contract.</td><td>The Contractor shall provide one new top end four plus one seated AC Maruti Grand Vitara Alpha plus Intelligent fully loaded to be kept available at all times for the sole use of the Engineer and his staff</td></tr>
<tr><td>6</td><td>Chapter 2 of Section-7 It.no 4.26 c in
Page no.49</td><td>Royalty recovery for hard rock not mentioned intender document</td><td>Please clarify</td><td>Rs.70 per cum Plus applicable GST of Hard Rock will be recovered from Running Bills</td></tr>
</table>

<table>
<tr><td>7</td><td>Bill of Quantitites In BOQ Item No 34 35 36, 37 and 38</td><td>For Manufacture of RCC NP3 Class Pipes by using OPC</td><td>Whereas it is mentioned as SRC and marked with ISI in Chapter 10 of Section 7 Clause No 10 1 on Page No 105 Please clarify</td><td>Tender conditions Prevails</td></tr>
<tr><td>8</td><td>Contract Data Section 6 Contract Data</td><td>There is no Mobilization Advance</td><td>10 Percent Interest Free Mobilization Advance can be considered</td><td>The amounts of the advance payment are: [42]
<table><tr><th>Nature of Advance</th><th>Amount (Rs.)</th><th>Conditions to be fulfilled</th></tr><tr><td>1. Mobilization</td><td>05% of the Contract price</td><td>On submission of un-conditional Bank Guarantee. (to be drawn before end of 45 days)</td></tr></table>Repayment of advance payment for mobilization : [42]
The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the 3rd Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 percent of the Contract Price or 3 months from the date of payment. The first installment of advance has to be recovered within 10 installments, whichever period concludes earlier, and shall be made at the rate of 7.5 percent of the amounts of all Interim Payment Certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clauses 17 and 26.</td></tr>
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<td>Contract Data on payment Section 6 Contract Data</td>
<td>There is no payment terms</td>
<td>Payment terms can be considered After Supply of RCC Pipes 75 Percent After Laying and Jointing 20 Percent After conducting Flow Test and Commissioning 5 Percent</td>
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</tr>
<tr>
<td>10</td>
<td>Engineers Requirement Page 23 of Section 7 Part 3</td>
<td>The requirement of site office including furniture Survey Instrument and personal computer and Lap Top with its accessories along with printer</td>
<td>For providing vehicle we would like to invite your kind reference that recently in Arkavathy Tender the same was included by incorporating to provide vehicle and the capital cost of the vehicle will be reimbursed at actual cost under provisional sum excluding insurance the same has not been considered on the similar lines either you can consider on the similar lines or delete from the contract</td>
<td>Tender conditions Prevails</td>
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<td>Tender conditions Prevails</td>
</tr>
</table>

12	For Relaxation in Tender conditions Tender document page no 4 to 9	Eligibility criteria have been relaxed for the tenders called by WWM EAST as referenced in indent No BWSSB/2022-23/WS/WORK INDENT/7362 It is clearly stated that the eligibility criteria for 900 mm Dia Rcc pipelines or larger will be the same as those for the 900 mm Dia Rcc pipe line	Requesting for relaxation in the eligibility criteria as 467 Rmt of 900mm Dia RCC NP-3 class sewers/16 rmt of 1200 mm dia casing pipe trenchless and 1591cum of RCC M20 grade in lieu of 467 rmt of 1800mm and above The Related documents and query letter have been submitted to your office by hand for further consideration	This PQ does not pertaining to this tender work
13	Royalty Page No 49 Chapter 2 Section 7 Item No 4 26c	Royalty recovered for Hard Rock is not mentioned in the tender document	We request you to please clarify	Rs.70 per cum Plus applicable GST of Hard Rock will be recovered from Running Bills.
14		High capacity Jetting machine, which is involved in the tender subject	Fabrication of High-Capacity Suction and Jetting machine with water recycling facility consisting of a total 10500 Liters tank capacity, 6000 cubic meters per hour capacity Vacuum system, 400 LPM & 200 bar pressure jetting system, suitable PTO, recycling system, and other standard accessories mounted on suitable 28 Ton GVW chassis • The requirement is for 10000L capacity Machine on 28T GVW Truck Chassis. BWSSB to specify wheelbase as the Tank Capacity shall get decided accordingly. Besides 28 T GVW Truck shall be available with less than 350 HP Engine. Since BWSSB desires shorter wheel-base, the option is to go for 4200mm wheel base wherein the overall tank capacity shall be 8000 to 9000L. Hence with the wheelbase is 4200 mm the overall tank capacity shall be 8000 – 9000 L capacity If the wheelbase of 4600-4800 mm is allowed, then the overall tank capacity can be 9000 to 10000 L.	Addendum attached

			• Engine Power Output (Sl. No. 1. B): While BWSSB has mentioned 350 HP, it is not clear if the Machine shall be with Single Engine. If the single Engine drives the Vacuum & Jetting Pump both simultaneously, besides the Auxiliary Systems from Automotive Truck Engine of 350 H.P. only (That too if available), then it would affect the performance as in case if Recycler Machine, the Suction & Jetting Operations are to be carried out simultaneously. We emphasis that since effective simultaneous combined operation of Jetting & Suction is required under Serial No. 10 (Under Operation Condition Capability), Machine with Single Engine shall not meet this requirement at all, as simultaneous Suction & Jetting operation shall be at the cost of each other, in view bifurcation / distribution of Engine power in two streams. Hence it would be prudent to have Auxiliary Engine which shall drive the Vacuum Pump directly, while Truck Engine shall give drive though PTO for its Jetting Pump & other Auxiliary functions. Thus the total overall minimum HP should be 415 HP (including Truck Chassis & Auxiliary Engine) for effective simultaneous / combined operation of Jetting & Suction Operation. Suction System (Sl. No. 4. A & 4. B): very sensitive & crucial not only for Recycler High Airflow of 6000 CuM / Hr. is important to achieve Powerful Suction of sludge, slurry and debris, as we gather that suction is to be done from a distance of 30 to 40M from respective manholes which also involves suction against gravity for more than 10M. Further the Vacuum rating should be minimum 0.75 bar for any of Imported Make of Pumps. In this regard, we presume that even the 'equivalent makes' shall be Imported One only & Tri-Lobe Type. • Casset/Derric Boom (Sl. No. 5a):	

			While Suction Hose of 12M long of 150 NB solicited. It would be better to consider 2 hoses of 7.5 M (totaling to 15M length) so that it is easy to connect & extend the Suction over longer distance &can be easily connected to Suction Hose on the Casset Boom. The Casset Boom should be preferred & considered as its give better flexibility in operation with & fine control over Suction Hose for its raising / lowering into the Manholes. • Filtration and Recycling System (Sl No. 6) The multistage filtration system should comprise of Sedimentation, Filtration and Hydro-Cyclones systems, as filtration shall be up to 200 microns and it appears 50 microns is mentioned inadvertently. As in Machine on 18T GVW it is stated as 500 microns. However the efficiency should be 200 microns instead of 500 microns, to avoid damage to the pipeline during High Pressure Jetting Operation. • High Pressure Jetting Pump (Sl. No. 7) High Pressure Jetting Pump, mist be of Imported Make, as no Company in India has ever offered indigenous built Jetting Pump with 400 LPM at 150 Bar. Hence the makes mentioned in TS including the equivalent one must be of Imported Makes. Jetting Pump is very sensitive & crucial not only for Recycler Application but even for Super Sucker Machine which are in use with BWSSB and even these Machines are equipped with Imported Jetting Pumps, of the makes mentioned in the TS. • Jetting Nozzles (Sl. No. 10. A > Recommended by us): Since Sewer Line cleaning is to be done for pipelines from 900 mm to 1400 mm diameter pipes, special nozzles are required for this application as follows	

			a) Highly efficient heavy duty nozzles with ceramic or carbide interchangeable inserts – 1 No of size 1¼". Weight – 7.7 kgs, D x L-107X180mm. b) Grenade nozzle made of hardened stainless steel with ceramic or carbide inserts – 1 No of size 1⅝". Weight -4.0kgs, DXL-87X139mm	

Chief Engineer (WWM-East)
BWSSB

ADDENDUM/CORRIGENDUM

Work Name:		Tender for Providing and Laying 900/1200/1400mm dia RCC NP 3 Class Sewer Line including Trenchless Technology Method from M V Garden to Amarjyothi Layout ISPS, Domluru.	
Sl. No	**Reference no.**	**Content as per Uploaded Bid document**	**To be read as**

1 — **Section 7 of Technical Specification**

IX) Vehicle Specifications:

Detailed Technical specifications of Suction and Jetting Unit with water Recycling Facility mounted on Minimum 18 Ton Vehicle Chassis

Sr. No.	Description	Technical Details
1)	**Vehicle Chassis**	
a)	GVW	28 Ton with maximum wheel base of 4600mm
b)	Engine Power Output	Min. 350 HP
C)	Emission standard	BS-VI OBD II or the latest applicable
2)	**Power Take Off**	
a)	Make	PZB - Italy /OMSI / OZCIHAN- MAKINA/ Equivalent Make
b)	Max. Torque	Adequate to drive all the systems
3)	**Tank**	
a)	**Capacity of tank**	10000 Liters
b)	Sludge tank	9000 Liters

IX) Vehicle Specifications:

Detailed Technical specifications of Suction and Jetting Unit with water Recycling Facility mounted on Minimum 28 Ton Vehicle Chassis

Sr. No.	Description	Technical Details
1)	**Vehicle Chassis**	
a)	GVW	28 Ton with maximum wheel base of 4600mm
b)	Engine Power Output	Min. 350 HP/with or without Auxiliary engine
C)	Emission standard for chasis	BS-VI OBD II or the latest applicable
2)	**Power Take Off**	
a)	Make	PZB - Italy /OMSI / OZCIHAN- MAKINA/ Equivalent Make
b)	Max. Torque	Adequate to drive all the systems
3)	**Tank**	
a)	**Capacity of tank**	10000 Liters
b)	Sludge tank	9000 Liters
c)	Fresh water tank	1000Liters

ADDENDUM/CORRIGENDUM

Work Name:		Tender for Providing and Laying 900/1200/1400mm dia RCC NP 3 Class Sewer Line including Trenchless Technology Method from M V Garden to Amarjyothi Layout ISPS, Domlur.	
Sl. No	**Reference no.**	**Content as per Uploaded Bid document**	**To be read as**

		c)	Fresh water tank	1000Liters	c)	Material of construction	Steel plates
		c)	Material of construction	Steel plates	d)	Thickness	6 mm
		d)	Thickness	6 mm	**4)**	**Suction System**	
		4)	**Suction System**		a)	Make	JUROP/HIBBON/Equivalent Make
		a)	Make	JUROP/HIBBON/Equivalent Make	b)	Capacity	Min. 6000 m^3/hr
		b)	Capacity	Min. 6000 m^3/hr	c)	Vacuum / Pressure rating	0.75 Bar Vacuum and 0.5 Bar Pressure
		c)	Vacuum / Pressure rating	0.75 Bar Vacuum and 0.5 Bar Pressure	**5)**	**Derrick Arm/Cassette Boom**	
		5)	**Derrick Arm/Cassette Boom**		a)	Suction Hose	
		a)	Suction Hose			Size-	Ø 150 mm, 15 meters
			Size-	Ø 150 mm x 12 meters		Type –	Flexible rubber or PVC Grey hose
			Type –	Flexible rubber or PVC Grey hose	c)	Aluminum End pipe- 1 meter long – 1 No.	Ø 150 mm
		c)	Aluminum End pipe- 1 meter long – 1 No.	Ø 150 mm	**6)**	**Filtration and recycling System**	
		6)	**Filtration and recycling System**		a)	Type	Multi stage filtration system
		a)	Type	Multi stage filtration system	b)	Capacity	250 microns
					7)	**High Pressure Jetting pump**	
					a)	Make	PRATISOLLI/ URACA/Equivalent Make
					b)	Capacity	400 LPM

ADDENDUM/CORRIGENDUM

Work Name:		Tender for Providing and Laying 900/1200/1400mm dia RCC NP 3 Class Sewer Line including Trenchless Technology Method from M V Garden to Amarjyothi Layout ISPS, Domluru.	
Sl. No	**Reference no.**	**Content as per Uploaded Bid document**	**To be read as**

		b)	Capacity	50 microns	
		7)	**High Pressure Jetting pump**		
		a)	Make	PRATISOLLI/ URACA/Equivalent Make	
		b)	Capacity	400 LPM	
		c)	Water pressure rating	Min.200 bar; Max.300 bar	
		d)	Safety valve	provided	
		8)	**Jetting Hose**		
		a)	Type	Special water and grease resistant flexible rubber material	
		b)	Size & length	11/4 inch	
		9)	**Hose Reel**		
		a)	Material of construction	Alloy steel	
		b)	Capacity to stack for jetting hose	120 meters	
		c)	Water pressure rating	Min.200 bar; Max.300 bar	
		d)	Safety valve	provided	
		8)	**Jetting Hose**		
		a)	Type	Special water and grease resistant flexible rubber material with special nozzles	
		b)	Size & length	11/4 inch	
		9)	**Hose Reel**		
		a)	Material of construction	Alloy steel	
		b)	Capacity to stack for jetting hose	120 meters	
		10)	**Operational condition capability**	Effective simultaneous combined operation of jetting and suction	

ADDENDUM/CORRIGENDUM

Work Name:		Tender for Providing and Laying 900/1200/1400mm dia RCC NP 3 Class Sewer Line including Trenchless Technology Method from M V Garden to Amarjyothi Layout ISPS, Domluru.	
Sl. No	**Reference no.**	**Content as per Uploaded Bid document**	**To be read as**
		10) **Operational condition capability** — Effective simultaneous combined operation of jetting and suction	Note: Contractor shall be responsible for registration and insurance of vehicle and Supply the vehicle within 9 months from the date of Agreement.
2	**Item no 59 Item Code A0015 in Schedule B**	Fabrication Of high Capacity Suction and Jetting machine with water recycling facility consisting of a total 10000 liters tank capacity vacuum system , 400 LPM &200 bar pressure jetting system, suitable PTO, recycling system, and other standard accessories mounted on suitable 28 Ton GVW chassis	Shall be read as Procurement and supply Of high Capacity Suction and Jetting machine with water recycling facility consisting of a total 10000 liters tank capacity vacuum system , 400 LPM &200 bar pressure jetting system, suitable PTO, recycling system, and other standard accessories mounted on suitable 28 Ton GVW chassis

Chief Engineer(WWM-E)
BWSSB